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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

46107-0068

First Inventor

Guoming G. Zhu

Title

An Ionization Detection System Architecture
to Minimize PCM Pin Count

Express Mail Label

ET 122 668 386 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commissioner for Patents
P. O. Box 1450
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **20**]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table,
or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **16**]
5. Oath or Declaration [Total Pages **3**]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS
Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,
or in an Application Data Sheet under 37 CFR 1.76:☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

Prior application information: Examiner _____ Group / Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied
under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by
reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.**19. CORRESPONDENCE ADDRESS**☐ Customer Number: _____ or ☒ Correspondence address below

Name	Douglas A. Mullen		
	Dickinson Wright PLLC		
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	Suite 800		
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Name (Print/Type)	Douglas A. Mullen	Registration No. (Attorney/Agent)	38,569
Signature	<i>Douglas A. Mullen</i>	Date	August 5, 2003

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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01576 U.S. PTO
08/05/0303915 U.S. PTO
10/634724

08/05/03

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT $x > \$$ **\$790.00**

Complete if Known

Application Number
Filing Date
First Named Inventor **Guoming G. Zhu**
Examiner Name
Group Art Unit
Attorney Docket No. **46107-0068**

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number

04-1061

Deposit Account Name

Dickinson Wright PLLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001	2001	750	375	Utility filing fee	750.00
1002	2002	330	165	Design filing	
1003	2003	520	260	Plant filing fee	
1004	2004	750	375	Reissue filing	
1005	2005	160	80	Provisional filing fee	
SUBTOTAL (1)					$x > \$$ \$750.00

2. EXTRA CLAIM FEES FOR UTILITY AND

Total Claims	Extra Claims	Fee from below	Fee Paid
20	-20** = 0	X 18.00 =	0.00
Independent Claims	3 - 3** = 0	X 84.00 =	0.00
Multiple Dependent			

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1202	2202	18	9	Claims in excess of 20	
1201	2201	84	42	Independent claims in excess of 3	
1203	2203	280	140	Multiple dependent claim, if not paid	
1204	2204	84	42	** Reissue independent claims over original patent	
1205	2205	18	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					$x > \$$ \$0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051	2051	130	65	Surcharge - late filing fee or oath	
1052	2052	50	25	Surcharge - late provisional filing fee or cover sheet	
1053	2053	130	130	Non - English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	2251	110	55	Extension for reply within first month	
1252	2252	410	205	Extension for reply within second month	
1253	2253	930	465	Extension for reply within third month	
1254	2254	1,450	725	Extension for reply within fourth month	
1255	2255	1,970	985	Extension for reply within fifth month	
1401	2401	320	160	Notice of Appeal	
1402	2402	320	160	Filing a brief in support of an appeal	
1403	2403	280	140	Request for oral hearing	
1451	2451	1,510	1,510	Petition to institute a public use proceeding	
1452	2452	110	55	Petition to revive - unavoidable	
1453	2453	1,300	650	Petition to revive - unintentional	
1501	2501	1,300	650	Utility issue fee (or reissue)	
1502	2502	470	235	Design issue fee	
1503	2503	630	315	Plant issue fee	
1460	2460	130	130	Petitions to the Commissioner	
1807	2807	50	50	Processing fee under 37 CFR § 1.17(q)	
1806	2806	180	180	Submission of Information Disclosure Statement	
8021	28021	40	40	Recording each patent assignment per property (times number of properties)	40.00
1809	2809	750	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	2810	750	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	2801	750	375	Request for Continued Examination (RCE)	
1802	2802	900	900	Request for expedited examination of a design application	
Other fee (specify)					
SUBTOTAL (3)					$x > \$$ \$40.00

*Reduced by Basic Filing Fee Paid

SUBMITTED BY

Name (Print/Type)

Douglas A. Mullen

Registration No.
(Attorney/Agent)

38,569

Complete (if applicable)

Telephone

202-457-0160

Signature

Douglas A. Mullen

Date

August 5, 2003

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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